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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,929	03/15/2001	Dong-Youl Lee	P56255	3658
<div>7590 Robert E. Bushnell Suite 300 1522 K Street, N.W. Washington, DC 20005-1202</div>				
EXAMINER				
DANIEL JR, WILLIE J				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
10/02/2008		PAPER		

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/805,929
Filing Date: March 15, 2001
Appellant(s): LEE, DONG-YOUL

Robert Bushnell (Reg. No.: 27,774)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 08 July 2008 appealing from the Office action mailed 06 February 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, **referring to the specification by page and line number**, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus

function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters. The brief is deficient because appellant failed to refer to each limitation of claims 16-19 with the specification by page and line number.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Widergen et al.** (hereinafter Widergen) (**US 5,890,064**) in view of **Fujii** (**US 5,818,918**) as applied to claim 19 above, and further in view of **Lu et al.** (hereinafter Lu) (**US 5,537,610**).

(7) Claims Appendix

A substantially correct copy of appealed claims 16-28 and 30 appears on pages 29-34 of the Appendix to the appellant's brief. The minor errors are as follows: Claims 1-15 and 29 are cancelled.

(8) Evidence Relied Upon

A. Patent Documents

5,890,064	WIDERGEN et al.	3-1999
5,537,610	MAUGER et al.	7-1996
5,818,918	FUJII	10-1998
5,999,813	LU et al.	12-1999

(9) Grounds of Rejection Applicable to the Appealed Claims

The following ground(s) of rejection are applicable to the appealed claims:

A. **Claim Rejections - 35 USC § 103**

Claims 16-18, 25-26, 28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Widergen et al.** (hereinafter Widergen) (**US 5,890,064**) in view of **Mauger et al.** (hereinafter Mauger) (**US 5,537,610**).

Regarding **claim 16**, Widergen discloses a call originating service method in a public/private common mobile communication system, the method comprising:

providing the telecommunications network (100) which reads on the claimed “public/private common mobile communication system” comprising a plurality of mobile terminals (116) which reads on the claimed “mobile stations (MSs)”, a mobile switching center (MSC) (112), a plurality of public mobile communication network base station controllers (BSCs) connected to the MSC (112), a plurality of public mobile communication network base station transceiver subsystems (BTSs) (114) connected to each of the plurality of BSCs, each of the plurality of these BTSs adapted to form a

corresponding public-only coverage area (140) which reads on the claimed “cell area”, a wireless office gateway (124) which reads on the claimed “public/private communication service unit” connected to one of the public mobile communication network's BSCs, and a RAN (126 - “includes radio equipment of RAN”; see col. 5, line 40-41) which reads on the claimed “private BTS” connected to the public/private communication service unit (124), the private BTS (126) adapted to form a public/private common cell area, one of said plurality of Mss being within said public/private common cell area (see col. 3, lines 61 - col. 4, line 25; Fig. 1), where the telecommunication network includes public and private coverage areas. The network including BSCs for controlling BS (114) as part of a base station subsystem and a plurality of network components would be obvious (see col. 4, lines 8-10,1-4), where the amount of components for the network can vary depending on factors such as size and scalability. ;

receiving at the public/private communication service unit (124) a call setup messages which reads on the claimed “call origination message” from the MS (122) in the public/private common cell area (142) through the private BTS (126) (see col. 7, lines 4-12,55-62; Fig. 1), where the network applies call setup messages for communicating with the terminals of the network;

determining whether the MS (120) in the public/private common cell area (142) is registered for a private mobile communication service by analyzing the received call origination message (see col. 7, lines 16-22,55-62), where the PN is used for determining if communication is for the corporate terminal (e.g., CMT - 120);

transmitting transparently the call origination message when the MS (11) in the public/private common cell area (142) is not registered for the private mobile communication service (see col. 13, lines 34-57), where calls from public mobile terminals (PMT) within the wireless office system (142) are transmitted to the MSC (112) which indicates the PMT are guest and not registered for the private cell area. The communication between the WO Gateway (124) and MSC (112) is via a trunk line (C) (see col. 7, lines 4-22; col. 9, lines 39-58; col. 12, lines 1-10,34-37; col. 13, lines 34-67; Fig. 1), where the originating of a call is transparent (see col. 7, lines 63-65; col. 9, lines 42-45,48-50) in which one of ordinary skill would clearly recognize that telecommunication systems are able to communicate and provide interoperability by using common standards, protocols, and signaling. The call origination message includes a phone number of the called party (see col. 7, lines 4-22; col. 13, lines 34-57), where calls for public mobile terminals (PMT) are directed to the MSC (112). As a note, the MSC provides the operations and functionality of a BSC in which one of ordinary skill in art would clearly recognize. , and

determining whether identification information for the private mobile communication service is included in the call origination message when the MS (120) in the public/private common cell area (142) is registered for the private mobile communication service (see col. 7, lines 4-22; col. 7, line 56 - col. 8, line 6); and

transmitting transparently the call origination message when the identification information (PN) is not included in the call origination message (see col. 7, lines 4-22;

col. 13, lines 34-57), where calls for public mobile terminals (PMT) are directed to the MSC (112) which indicates the PMT do not have a PN, and

providing private mobile communication service for the MS (120) in the public/private common cell area when the identification information (PN) is included in the call origination message (see col. 7, lines 4-22), where the calls are directed to corporate terminals (120) according to the PN. Widergen inexplicitly discloses having the feature(s) of transparently transmitting the call origination message to one of said plurality of public mobile communication network BSCs. However, the examiner maintains that the feature(s) of transparently transmitting the call origination message to one of said plurality of public mobile communication network BSCs was well known in the art, as taught by Mauger.

In the same field of endeavor, Mauger discloses the feature(s) of transparently transmitting the call origination message to one of said plurality of public mobile communication network BSCs (63) (see col. 11, line 66 - col. 12, line 2; col. 11, lines 49-53; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 22, 24, & 27), where the calls are transmitted between the PABX (60) to a BSC (63) which is an intelligent BSC with MSC functionality. As a note, Mauger at the least further discloses the feature(s) when the MS in the public/private common cell area (e.g., corporate site 5) is not registered for the private mobile communication service, and determining whether identification information for the private mobile communication service is included in the call origination message when the MS in the public/private common cell area is registered for the private mobile communication service (see col. 11, lines 35-40, 49-53; col. 11, line 66

- col. 12, line 2; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 22, 24, & 27); and when the identification information (e.g., a corporate number) is not included in the call origination message, and providing private mobile communication service for the MS in the public/private common cell area when the identification information is included in the call origination message (see col. 11, lines 35-40, 49-53; col. 11, line 66 - col. 12, line 2; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 22, 24, & 27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen and Mauger to have the feature(s) of transparently transmitting the call origination message to one of said plurality of public mobile communication network BSCs, in order to provide a mobile communications network including a PCN network and a PABX coupled to the PCN network whereby calls involving mobile subscribers associated with the PABX are routed via the PCN network, as taught by Mauger (see col. 1, line 65 - col. 2, line 2).

Regarding **claim 17**, Widergen discloses of a public/private common mobile communication system (100) adapted to provide a public/private mobile communication service in association with a public land mobile network (PLMN) (102) (see Fig. 1), the system comprising:

a plurality of mobile stations (MSs) (116), a mobile switching center (MSC) (112), a plurality of public mobile communication network base station controllers (BSCs) connected to the MSC (112), and a plurality of public mobile communication network base station transceiver subsystems (BTSs) (114) connected to the BSC's, each of the plurality of public mobile communication network BTSs being adapted to form

corresponding public-only cell areas (140) (see col. 4, lines 4-16), where the network includes a base station (114) in which the BSC would be obvious for controlling the base station. Also, the plurality of components would be obvious according to factors such as size and scalability (see col. 4, lines 8-10);

a private BTS (126) connected to the public/private communication service unit (124), the private BTS (126) adapted to form a public/private common cell area (142), the public/private communication service unit (124) receives a call origination message from a particular one of the plurality of MSs (120) located in the public/private common cell area (142) through the private BTS (126) (see col. 7, lines 4-22,55-62; Fig. 1),

the public/private communication service unit (124) being configured to transparently transmit the call origination message when the call origination message is a public mobile communication service request message (see col. 10, line 56 - col. 11, line 1; col. 13, lines 34-57), where calls for the public system is routed between the WO Gateway (124) and the MSC (112) via the trunk line,

the public/private communication service unit (124) being configured to provide network access for a corresponding private mobile communication service when the call origination message is a private mobile communication service request message (see col. 5, lines 60-67; col. 7, lines 55-62). Widergen inexplicitly discloses having the feature(s) a public/private communication service unit connected to one of said plurality of public mobile communication network BSCs; transparently transmit the call origination message to one of the plurality of public mobile communication network BSCs. However, the examiner maintains that the feature(s) a public/private communication

service unit connected to one of said plurality of public mobile communication network BSCs; transparently transmit the call origination message to one of the plurality of public mobile communication network BSCs was well known in the art, as taught by Mauger.

Mauger further discloses the feature(s) a PABX (60) which reads on the claimed “public/private communication service unit” connected to one of said plurality of public mobile communication network BSCs (63) (see col. 14, lines 42-58; col. 15, lines 20-23; Figs. 24, 26, 27), where corporate site (5) is able to provide communication services;

transparently transmit the call origination message to one of the plurality of public mobile communication network BSCs (63) (see col. 11, lines 35-40, 49-53; col. 11, line 66 - col. 12, line 2; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 22, 24, & 27), where the calls are transmitted between the PABX (60) to a BSC (63) which is an intelligent BSC with MSC functionality. As a note, Mauger at the least further discloses the feature(s) when the call origination message is a public mobile communication service request message, the public/private communication service unit being configured to provide network access for a corresponding private mobile communication service when the call origination message is a private mobile communication service request message (see col. 11, lines 35-40, 49-53; col. 11, line 66 - col. 12, line 2; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 22, 24, & 27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen and Mauger to have the feature(s) a public/private communication service unit connected to one of said plurality of public mobile communication network BSCs; transparently transmit the call

origination message to one of the plurality of public mobile communication network BSCs, in order to provide a mobile communications network including a PCN network and a PABX coupled to the PCN network whereby calls involving mobile subscribers associated with the PABX are routed via the PCN network, as taught by Mauger (see col. 1, line 65 - col. 2, line 2).

Regarding **claim 18**, Widergen discloses a call originating service method in a public/private common mobile communication system (100) (see Fig. 1), the method comprising:

providing the public/private common mobile communication system (100) comprising a plurality of mobile stations (MSs) (116), a mobile switching center (MSC) (112), a plurality of public mobile communication network base station controllers (BSCs) connected to the MSC (112), a plurality of public mobile communication network base station transceiver subsystems (BTSSs) (114) connected to each of the BSC's, each of the plurality of public mobile communication network BTSSs (114) adapted to form a corresponding public-only cell area (coverage area) (140) (see col. 3, line 61 - col. 4, line 16), where the network includes a base station (114) in which the BSC would be obvious for controlling the base station. Also, the plurality of components would be obvious according to factors such as size and scalability (see col. 4, lines 8-10),

a private BTS (126) connected to the public/private communication service unit (124), the private BTS (126) adapted to form a public/private common cell area (142) (see Fig. 1);

determining whether a call origination message is a public mobile communication service request message or a private mobile communication service request message upon receiving the call origination message that requests origination of a call from one of said plurality of mobile stations (120) located in said public/private common cell area (142) through the private BTS (126) (see col. 7, lines 4-22,55-67; col. 9, lines 1-67), where calls for communication are routed to a mobile located in the public or private system; and

transmitting transparently the call origination message to a public land mobile network (PLMN) (102) when the call origination message is a public mobile communication service request message (see col. 7, lines 4-15; col. 9, lines 39-58; col. 12, lines 34-37; col. 13, lines 34-67), and

providing a corresponding private mobile communication service when the call origination message is a private mobile communication service request message (see col. 7, lines 4-22,55-62). Widergen inexplicitly discloses having the feature(s) a public/private communication service unit connected to a particular one of the plurality of public mobile communication network BSCs; transmitting transparently the call origination message to a base station controller (BSC) of a public land mobile network (PLMN). However, the examiner maintains that the feature a public/private communication service unit connected to a particular one of the plurality of public mobile communication network BSCs; transmitting transparently the call origination message to a base station controller (BSC) of a public land mobile network (PLMN) was well known in the art, as taught by Mauger.

Mauger further discloses the feature a public/private communication service unit (60) connected to a particular one of the plurality of public mobile communication network BSCs (63) (see col. 14, lines 42-58; col. 15, lines 20-23; Figs. 24, 26, 27);

transmitting transparently the call origination message to a base station controller (BSC) of a public land mobile network (PLMN) (see col. 11, lines 35-40, 49-53; col. 11, line 66 - col. 12, line 2; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 22, 24, & 27), where corporate site (5) is able to provide communication services and the calls are transmitted between the PABX (60) to a BSC (63) which is an intelligent BSC with MSC functionality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen and Mauger to have the feature a public/private communication service unit connected to a particular one of the plurality of public mobile communication network BSCs; transmitting transparently the call origination message to a base station controller (BSC) of a public land mobile network (PLMN), in order to provide a mobile communications network including a PCN network and a PABX coupled to the PCN network whereby calls involving mobile subscribers associated with the PABX are routed via the PCN network, as taught by Mauger (see col. 1, line 65 - col. 2, line 2).

Regarding **claim 25**, the combination of Widergen and Mauger discloses every limitation claimed, as applied above (see claim 16), in addition Widergen further discloses the method of claim 16, the common cell area (142) being an area that provides both public mobile and private mobile communication services to a MS (120) within the

area without requiring the MS to roam (see Fig. 1), where the mobile terminals with area (142) are able to have public and private communication services.

Regarding **claim 26**, the combination of Widergen and Mauger discloses every limitation claimed, as applied above (see claim 17), in addition Widergen further discloses the method of claim 17, a public/private communication service unit (e.g., 142) and the private BTS (e.g., 126) providing both public and private mobile services simultaneously and without requiring a MS in the common cell area to roam to a new location to receive (see Fig. 1), where the mobile terminals with area (142) are able to have public and private communication services.

Regarding **claim 28**, the combination of Widergen and Mauger discloses every limitation claimed, as applied above (see claim 16), in addition Widergen further discloses the method of claim 16, public mobile communication service or private mobile communication service is provided based on the call origination message transmitted from the MS (120) (see col. 7, lines 55-60; col. 8, lines 21-28; col. 9, lines 1-8,39-45; col. 10, lines 2-7), where a call is originated in which one of ordinary skill in the art would clearly recognize.

Regarding **claim 30**, the combination of Widergen and Mauger discloses every limitation claimed, as applied above (see claim 16), in addition Widergen further discloses the method of claim 16, the call origination message being a message according to MS (120) communication signaling (see col. 5, lines 4-41; col. 7, lines 55-60), where a call is originated in which one of ordinary skill in the art would clearly recognize.

Claims 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Widergen et al.** (hereinafter Widergen) (**US 5,890,064**) in view of **Fujii** (**US 5,818,918**).

Regarding **claim 19**, Widergen discloses a call originating service method in a public/private common mobile communication system (100), the method comprising:
providing a public land mobile network (PLMN) (102) comprising a base station transceiver subsystem (BTS) (114) adapted to form a public cell area that is interworked with a private mobile communication network (142) comprising a BTS adapted to form a public/private common cell area (142) enabling a subscriber (120) to be provided with both a public mobile communication service and a private mobile communication service using a single mobile station (120) in said public/private common cell area (142) (see col. 3, line 61 - col. 4, line 19; col. 4, lines 27-33; Fig. 1);

determining whether a call origination message is a public mobile communication service request message or a private mobile communication service request message upon receiving the call origination message for requesting origination of a call from a mobile station (CMT -120) in the public/private common cell area through the BTS (126) in the private mobile communication network (142) (see col. 7, lines 4-22,55-67; col. 9, lines 1-67), where calls for communication are routed to a mobile located in the public or private system; and

transparently transmitting the call origination message to the PLMN when the call origination message is a public mobile communication service request message (see col. 7, lines 4-15; col. 9, lines 39-58; col. 12, lines 34-37; col. 13, lines 34-67), where the originating of a call is transparent (see col. 9, lines 42-45,48-50) in which one of ordinary

skill would clearly recognized that telecommunication systems are able to communicate and provide interoperability by using common standards, protocols, and signaling, and providing a corresponding private mobile communication service when the call origination message is a private mobile communication service request message (see col. 7, lines 4-22,55-62). Widergen inexplicitly discloses having the feature(s) transparently transmitting the call origination message to a base station controller (BSC) of the PLMN. However, the examiner maintains that the feature(s) transparently transmitting the call origination message to a base station controller (BSC) of the PLMN was well known in the art, as taught by Fujii.

In the same field of endeavor, Fujii discloses the feature(s) transparently transmitting the call origination message a base station controller (BSC) of the PLMN (see col. 2, lines 25-45; Figs. 1), where the PBX(15) is directly connected to the public PHS network (11) in which a base station controller would be inherent as evidenced by the fact that one of ordinary skill in the art would clearly recognize. As a note, Fujii at the least further discloses the feature(s) when the call origination message is a public mobile communication service request message, and providing a corresponding private mobile communication service when the call origination message is a private mobile communication service request message (see col. 3, lines 31-43; col. 2, lines 25-45; Figs. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen and Fujii to have the feature(s) transparently transmitting the call origination message to a base station

controller (BSC) of the PLMN, in order to provide a personal handy phone system which enables communication between a private PHS base station and a public PHS terminal, as taught by Fujii (see col. 1, lines 37-39).

Regarding **claim 27**, the combination of Widergen and Fujii discloses every limitation claimed, as applied above (see claim 19), in addition Widergen further discloses the method of claim 19, the public/private common cell (142) area providing both public mobile and private mobile services to a MS (120) located within the common cell, both public mobile and private mobile services being available to the MS without requiring the MS to move or roam to a different location (see Fig. 1), where the mobile terminals with area (142) are able to have public and private communication services.

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Widergen et al.** (hereinafter Widergen) (**US 5,890,064**) in view of **Mauger et al.** (hereinafter Mauger) (**US 5,537,610**) as applied to claims 16 and 17 above, and further in view of **Fujii (US 5,818,918)**.

Regarding **claim 20**, the combination of Widergen and Mauger discloses every limitation claimed as applied above in claim 16. The combination of Widergen and Mauger does not specifically disclose having the feature calls from the MS in the common cell area to the public mobile communication network are directly connected and interworked with the public mobile communication network without having to go through additional circuitry. However, the examiner maintains that the feature calls from the MS in the common cell area to the public mobile communication network are directly

connected and interworked with the public mobile communication network without having to go through additional circuitry was well known in the art, as taught by Fujii.

In the same field of endeavor, Fujii discloses the feature calls from the MS in the common cell area (18) to the public PHS network (11) which reads on the claimed “public mobile communication network” are directly connected and interworked with the public mobile communication network (11) without having to go through additional circuitry (see col. 2, lines 25-45; Figs. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen, Mauger, and Fujii to have the feature calls from the MS in the common cell area to the public mobile communication network are directly connected and interworked with the public mobile communication network without having to go through additional circuitry, in order to provide a personal handy phone system which enables communication between a private PHS base station and a public PHS terminal, as taught by Fujii (see col. 1, lines 37-39).

Regarding **claim 21**, the combination of Widergen and Mauger discloses every limitation claimed as applied above in claim 17. The combination of Widergen and Mauger does not specifically disclose having the feature calls from the MS in the common cell area to the public mobile communication network are directly connected and interworked with the public mobile communication network without having to go through additional circuitry. However, the examiner maintains that the feature calls from the MS in the common cell area to the public mobile communication network are directly

connected and interworked with the public mobile communication network without having to go through additional circuitry was well known in the art, as taught by Fujii.

Fujii further discloses the feature calls from the MS in the common cell area (18) to the public PHS network (11) which reads on the claimed “public mobile communication network” are directly connected and interworked with the public mobile communication network (11) without having to go through additional circuitry (see col. 2, lines 25-45; Figs. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen, Mauger, and Fujii to have the feature calls from the MS in the common cell area to the public mobile communication network are directly connected and interworked with the public mobile communication network without having to go through additional circuitry, in order to provide a personal handy phone system which enables communication between a private PHS base station and a public PHS terminal, as taught by Fujii (see col. 1, lines 37-39).

Claims 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Widergen et al.** (hereinafter Widergen) (**US 5,890,064**) in view of **Mauger et al.** (hereinafter Mauger) (**US 5,537,610**) as applied to claims 16 and 17 above, and further in view of **Lu et al.** (hereinafter Lu) (**US 5,599,813**).

Regarding **claim 22**, the combination of Widergen and Mauger discloses every limitation claimed as applied above in claim 16. The combination of Widergen and Mauger does not specifically disclose having the feature(s) calls from the MS in the

common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network. However, the examiner maintains that the feature(s) calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network was well known in the art, as taught by Lu.

In the same field of endeavor, Lu discloses the feature(s) calls from the MS (458) in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network (see col. 15, lines 41-63; Figs. 6A, 7, 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen, Mauger, and Lu to have the feature(s) calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network, in order to reduce the usage of public network bandwidth with a consequent reduction in the charges, as taught by Lu (see col. 15, lines 60-63; col. 6, lines 64-67).

Regarding **claim 24**, the combination of Widergen and Mauger discloses every limitation claimed as applied above in claim 17. The combination of Widergen and Mauger does not specifically discloses having the feature(s) calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone

network. However, the examiner maintains that the feature(s) calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network was well known in the art, as taught by Lu.

Lu further discloses the feature(s) calls from the MS (458) in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network (see col. 15, lines 41-63; Figs. 6A, 7, 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen, Mauger, and Lu to have the feature(s) calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network, in order to reduce the usage of public network bandwidth with a consequent reduction in the charges, as taught by Lu (see col. 15, lines 60-63; col. 6, lines 64-67).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Widergen et al.** (hereinafter Widergen) (**US 5,890,064**) in view of **Fujii** (**US 5,818,918**) as applied to claim 19 above, and further in view of **Lu et al.** (hereinafter Lu) (**US 5,999,813**).

Regarding **claim 23**, the combination of Widergen and Fujii discloses every limitation claimed as applied above in claim 19. The combination of Widergen and Fujii inexplicitly discloses having the feature(s) calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile

communications network and are not routed through a landline telephone network.

However, the examiner maintains that the feature(s) calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network was well known in the art, as taught by Lu.

Lu further discloses the feature(s) calls from the MS (458) in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network (see col. 15, lines 41-63; Figs. 6A, 7, 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Widergen, Fujii, and Lu to have the feature(s) calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network, in order to reduce the usage of public network bandwidth with a consequent reduction in the charges, as taught by Lu (see col. 15, lines 60-63; col. 6, lines 64-67).

(10) Response to Argument

A1. Argument of Claims 16-19 (see item VII, par. bridging pgs. 18-19 of brief)

Appellant argues - ...*call origination message is the packet*....

A2. Response to argument of A1

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., see item A1) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding appellant's argument in item A1, the appellant's argument relies on a feature(s) indicated above that is not recited in the claim(s).

Furthermore, appellant admits ...*Widergen actually teaches that the call origination message...* (see pg. 19, item VII, 2nd full par., lines 6-7).

Regarding appellant's comment on pgs. 20-21 (assertion #1), the comment is addressed for the same reasons as applied to claims 16-19 above.

B1. Argument of Claims 16-18 (see pg. 18, item VII, 2nd full par. (¶)) of brief)

Appellant argues - ...*does not teach...transparent transmission of a call origination message...*

B2. Response to argument of B1

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to appellant's arguments above (see B1), the Examiner respectfully disagrees with appellant's argument. Appellant has failed to appreciate the combined

teachings of well-known prior art Widergen with Mauger (for claims 16-18) that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. As a note, appellant did not argue the other feature(s) of claims 16-18 in which the Examiner interprets that appellant must agree that the feature(s) is met by the applied reference. Note 2 - appellant admits ...*Widergen...teaches transparent transmission* (see par. bridging pgs. 18-19, item VII, line(s) 10-11). Note 3 - appellant admits ...*Widergen actually teaches that the call origination message...* (see pg. 19, item VII, 2nd full par., lines 6-7). Note 4 - instant application on pg. 17, [0033], basically describes the call origination message as the user inputting a phone number and pressing send to transmit to a base station for originating a call. In particular, Widergen discloses the argument(s) as related to the claimed feature(s)

receiving at the public/private communication service unit (124) a call setup messages which reads on the claimed "call origination message" from the MS (122) in the public/private common cell area (142) through the private BTS (126) (see col. 7, lines 4-12,55-62; Fig. 1), where the network applies call setup messages for communicating with the terminals of the network and user dials a destination phone to contact a called terminal in which one of ordinary skill in the art would clearly recognize (see col. 8, lines 21-28; col. 9, lines 1-8,39-45; col. 10, lines 2-7; col. 5, lines 4-41);

transmitting transparently the call origination message (see col. 13, lines 34-57), where calls from public mobile terminals (PMT) within the wireless office system (142) are transmitted to the MSC (112). The communication between the WO Gateway (124) and MSC (112) is via a trunk line (C) (see col. 7, lines 4-22; col. 9, lines 39-58; col. 12,

lines 1-10,34-37; col. 13, lines 34-67; Fig. 1), where the originating of a call is transparent (see col. 7, lines 63-65; col. 9, lines 42-45,48-50) in which one of ordinary skill would clearly recognize that telecommunication systems are able to communicate and provide interoperability by using common standards, protocols, and signaling. The call origination message includes a phone number of the called party (see col. 7, lines 4-22; col. 13, lines 34-57), where calls for public mobile terminals (PMT) are directed to the MSC (112). As a note, the MSC provides the operations and functionality of a BSC in which one of ordinary skill in art would clearly recognize. As further support in the same field of endeavor, Mauger at the least discloses the argument(s) as related to the claimed feature(s)

transparently transmitting the call origination message to one of said plurality of public mobile communication network BSCs (63) (see col. 11, line 66 - col. 12, line 2; col. 11, lines 35-40,49-53; col. 14, lines 41-48; col. 15, lines 20-27; Figs. 22, 24, & 27), where the calls are transmitted between the PABX (60) to a BSC (63) which is an intelligent BSC with MSC functionality and the system allows calls that are set-up and routed. Therefore, the combination(s) of the reference(s) Widergen with Mauger (for claims 16-18) as addressed above more than adequately meets the claim limitations.

Furthermore, appellant states “...*if a message is changed and then restored to its original form within a single transmission system, the transmission system is still transparent...*” (see pg. 16, item VII, section 10), which appears to describe that a message can change but still be transparent (or interpreted). For example, Widergen discloses communication between the WO Gateway (124) and MSC (112) is via a trunk

line (C) (see col. 7, lines 4-22; col. 9, lines 39-58; col. 12, lines 1-10,34-37; col. 13, lines 34-67; Fig. 1), where the originating of a call is transparent (see col. 7, lines 63-65; col. 9, lines 42-45,48-50) in which one of ordinary skill would clearly recognize that telecommunication systems are able to communicate and provide **interoperability** by using common standards, protocols, and signaling. Therefore, different communication carriers (system) utilizing different vendors (or equipment) can exchange communication from end-to-end.

Regarding appellant's comment on pgs. 21-28 (i.e., assertion #2, 4-8, & 10-12), the comment is addressed for the same reasons as applied to claims 16-18 above.

C1. Argument of Claim 19 (see pg. 18, item VII, 2nd full par. (¶)) of brief)

Appellant argues - ...*does not teach...transparent transmission of a call origination message...*

C2. Response to argument of C1

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to appellant's arguments above (see C1), the Examiner respectfully disagrees with appellant's argument. Appellant has failed to appreciate the combined teachings of well-known prior art Widergen with Fujii (for claim 19) that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. As a note, appellant did not argue the other feature(s) of claim 19 in which the

Examiner interprets that appellant must agree that the feature(s) is met by the applied reference. Note 2 - appellant admits ...*Widergen...teaches transparent transmission* (see par. bridging pgs. 18-19, item VII, line(s) 10-11). Note 3 - appellant admits ...*Widergen actually teaches that the call origination message...* (see pg. 19, item VII, 2nd full par., lines 6-7). Note 4 - instant application on pg. 17, [0033], basically describes the call origination message as the user inputting a phone number and pressing send to transmit to a base station for originating a call. In particular, Widergen discloses the argument(s) as related to the claimed feature(s)

receiving at the public/private communication service unit (124) a call setup messages which reads on the claimed "call origination message" from the MS (122) in the public/private common cell area (142) through the private BTS (126) (see col. 7, lines 4-12,55-62; Fig. 1), where the network applies call setup messages for communicating with the terminals of the network and user dials a destination phone to contact a called terminal in which one of ordinary skill in the art would clearly recognize (see col. 8, lines 21-28; col. 9, lines 1-8,39-45; col. 10, lines 2-7; col. 5, lines 4-41);

transmitting transparently the call origination message (see col. 13, lines 34-57), where calls from public mobile terminals (PMT) within the wireless office system (142) are transmitted to the MSC (112). The communication between the WO Gateway (124) and MSC (112) is via a trunk line (C) (see col. 7, lines 4-22; col. 9, lines 39-58; col. 12, lines 1-10,34-37; col. 13, lines 34-67; Fig. 1), where the originating of a call is transparent (see col. 7, lines 63-65; col. 9, lines 42-45,48-50) in which one of ordinary skill would clearly recognize that telecommunication systems are able to communicate

and provide interoperability by using common standards, protocols, and signaling. The call origination message includes a phone number of the called party (see col. 7, lines 4-22; col. 13, lines 34-57), where calls for public mobile terminals (PMT) are directed to the MSC (112). As a note, the MSC provides the operations and functionality of a BSC in which one of ordinary skill in art would clearly recognize. As further support in the same field of endeavor, Fujii at the least discloses the argument(s) as related to the claimed feature(s)

transparently transmitting the call origination message to a base station controller (BSC) of the PLMN (see col. 2, lines 25-45; col. 3, lines 31-43; Fig. 1), where the PBX (15) is directly connected to the public PHS network (11) in which a base station controller would be inherent as evidenced by the fact that one of ordinary skill in the art would clearly recognize and PS (e.g., 19, 20) are able to originate/receive calls in the personal handy phone system. Therefore, the combination(s) of the reference(s) Widergen with Fujii (for claim 19) as addressed above more than adequately meets the claim limitations.

Furthermore, appellant states “...*if a message is changed and then restored to its original form within a single transmission system, the transmission system is still transparent...*” (see pg. 16, item VII, section 10), which appears to describe that a message can change but still be transparent (or interpreted). For example, Widergen discloses communication between the WO Gateway (124) and MSC (112) is via a trunk line (C) (see col. 7, lines 4-22; col. 9, lines 39-58; col. 12, lines 1-10,34-37; col. 13, lines 34-67; Fig. 1), where the originating of a call is transparent (see col. 7, lines 63-65; col. 9,

lines 42-45,48-50) in which one of ordinary skill would clearly recognize that telecommunication systems are able to communicate and provide **interoperability** by using common standards, protocols, and signaling. Therefore, different communication carriers (system) utilizing different vendors (or equipment) can exchange communication from end-to-end.

Regarding appellant's comment on pgs. 21-28 (i.e., assertion #2 & 4-12), the comment is addressed for the same reasons as applied to claim 19 above.

D1. Argument of Claims 16-19 (see pg. 19, item VII, 1st - 2nd full par. (¶)) of brief)

Appellant argues - *...message is changed in this scenario...message without it being restored...message is permanently changed...*

D2. Response to argument of D1

Regarding appellant's arguments above (see D1), the Examiner respectfully disagrees. Appellant has failed to interpret and appreciate the combined teachings of the prior art Widergen with Mauger (for claims 16-18) or Fujii (for claim 19) that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. In particular, Widergen discloses communication between mobile station in telecommunication network with a public and private area (see Fig. 1), where the communication between the WO Gateway (124) and MSC (112) is via a trunk line (C) (see col. 7, lines 4-22; col. 9, lines 39-58; col. 12, lines 1-10,34-37; col. 13, lines 34-67;

Fig. 1), and where the originating of a call is transparent (see col. 5, lines 60-65; col. 7, lines 63-65; col. 9, lines 42-45,48-50) in which one of ordinary skill would clearly recognize that telecommunication systems are able to communicate and provide interoperability by using common standards, protocols, and signaling. As further support in the same field of endeavor, Mauger (see Figs. 22, 24, & 27) and Fujii (see Fig. 1) disclose of communication between private and public systems. Therefore, the combination(s) of the reference(s) Widergen with Mauger (for claims 16-18) or Fujii (for claim 19) as addressed above more than adequately meets the claim limitations.

Furthermore, appellant states “...*if a message is changed and then restored to its original form within a single transmission system, the transmission system is still transparent...*” (see pg. 16, item VII, section 10), which appears to describe that a message can change but still be transparent (or interpreted). For example, Widergen discloses communication between the WO Gateway (124) and MSC (112) is via a trunk line (C) (see col. 7, lines 4-22; col. 9, lines 39-58; col. 12, lines 1-10,34-37; col. 13, lines 34-67; Fig. 1), where the originating of a call is transparent (see col. 7, lines 63-65; col. 9, lines 42-45,48-50) in which one of ordinary skill would clearly recognize that telecommunication systems are able to communicate and provide **interoperability** by using common standards, protocols, and signaling. Therefore, different communication carriers (systems) utilizing different vendors (or equipment) can exchange communication from end-to-end.

Regarding appellant’s comment on pgs. 21-22 (assertion #3), the comment is addressed for the same reasons as applied to claims 16-19 above.

E. Response to Argument(s) of Claims 16-28 and 30

Due to the common knowledge of the applied well known prior art, the examiner's conclusion of obviousness is **not** based upon improper hindsight reasoning. It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Furthermore, the Examiner respectfully disagrees with appellant's argument(s). Appellant has failed to interpret and appreciate the combined teachings of the prior art (i.e., applied references) that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. Consequently, all applied references were well known prior art prior to the filing of the instant application.

In the present application, the Appellant is reminded that the Examiner relies on the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

First, the Examiner considered the Widergen reference alone and when compared with the claims 16-28 and 30 at issue in the present application, the Examiner found a difference(s) in the wireless communications system of the Widergen reference and the present application.

Second, the Examiner considered the similar teachings found in the other applied reference(s) Mauger, Fujii, and Lu that accomplished the claimed features of claims 16-28 and 30 not taught by Widergen. The applied reference(s) Mauger, Fujii, and Lu teach of a wireless communications system which is in the same field of endeavor as the Widergen reference. However, the Examiner also considered that for *a person with the common knowledge and ordinary skill in the art* of wireless communications systems would have obviously accomplished and developed the specific teachings and/or advantages of the apparatus and method claimed by the appellant by considering the systems accomplished by the teachings of the applied reference(s) Mauger, Fujii, and Lu.

Finally, the Examiner, after considering *the common knowledge available to a person of ordinary skill in the art* of wireless communications systems, concluded that Widergen's teachings when modified by the teachings of Mauger, Fujii, and Lu would render the present application obvious by the combined teachings of the references, as set forth in the rejections.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

(12) Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/WJD,Jr/

Willie J. Daniel, Jr.
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28 September 2008

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